

Title (en)
METHOD IN PUTTING TOGETHER OF A DOWN-THE-HOLE DRILLING APPARATUS AND A DOWN-THE-HOLE DRILLING APPARATUS

Title (de)
VERFAHREN ZUM KOMBINIEREN EINER ABWÄRTSBOHRVORRICHTUNG MIT EINER ZWEITEN ABWÄRTSBOHRVORRICHTUNG

Title (fr)
PROCÉDÉ PERMETTANT DE PRÉPARER UN APPAREIL DE FORAGE DE FOND DE TROU, ET APPAREIL DE FORAGE DE FOND DE TROU

Publication
EP 3011127 A4 20170308 (EN)

Application
EP 14829014 A 20140515

Priority
• FI 20135794 A 20130726
• FI 2014050366 W 20140515

Abstract (en)
[origin: WO2015011336A1] The invention relates to a method in putting together of a down-the-hole drilling apparatus and a down-the-hole drilling apparatus, which apparatus has a drilling device (1) that consists of a casing part (2) and a drilling unit (3) existing at least during a drilling situation in connection with the above, which drilling unit includes in its drilling head a drilling arrangement, such as first drilling means (4) for drilling a center hole and second drilling means (5) for reaming the center hole for the casing part (2), the drilling means (4, 5) being coupled on the first hand at least during a drilling situation mutually in a power transmitting manner in order to carry out co-operation thereof for a rotational motion, a feeding motion and/or a hammering motion, and on the other hand removably in connection with the casing part (2) in order to enable at least removal of the first drilling means (4) from a drilled hole. The casing part (2) is arranged to be pulled into the hole to be drilled through a shoulder arrangement being arranged at an end thereof by a power influence directed thereto from the drilling unit (3). At an opposite end (II) of the drilling arrangement, such as the second drilling means (5), with respect to a drilling surface (P) of the drilling unit (3), is being arranged a built-in skirt part (z), which has in radial direction (r) an internal shoulder arrangement (x) for pulling the casing part (2) into the hole to be drilled by co-operation of the said internal shoulder arrangement (x) and the external shoulder arrangement (y) arranged at the end (I) of the casing part.

IPC 8 full level
E21B 17/14 (2006.01); **E21B 7/20** (2006.01); **E21B 17/04** (2006.01)

CPC (source: EP US)
E21B 7/20 (2013.01 - EP US); **E21B 10/36** (2013.01 - EP US); **E21B 17/00** (2013.01 - US); **E21B 17/04** (2013.01 - EP US); **E21B 17/076** (2013.01 - EP US); **E21B 19/18** (2013.01 - US)

Citation (search report)
• [IDY] EP 1144797 A1 20011017 - ILOMAEKI VALTO [FI]
• [XYI] FI 121635 B 20110215 - PIRKAN LAATUPALVELU OY [FI]
• [XI] WO 2009115638 A1 20090924 - ATLAS COPCO ROTEX AB OY [FI], et al
• See references of WO 2015011336A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2015011336 A1 20150129; EP 3011127 A1 20160427; EP 3011127 A4 20170308; EP 3011127 B1 20220119; FI 10639 U1 20141009; US 2016130879 A1 20160512; US 9970238 B2 20180515

DOCDB simple family (application)
FI 2014050366 W 20140515; EP 14829014 A 20140515; FI U20144109 U 20140515; US 201414895097 A 20140515